### Federal Aviation Administration, Fairbanks Flight Standards District Office

6450 Airport Way, Suite 2, Fairbanks, Alaska 99709, (907) 474-0276, 1-800-294-5119, fax (907) 479-9650 www.alaska.faa.gov/faifsdo

# AIRWORTHINESS NEWSLETTER

For Inspection Authorization Holders, A&Ps and Repairmen

Larry E. Dalrymple–Manager Gilbert "Gil" R. Glover-Assistant Manager James H. Tupper–Airworthiness Supervisor

# August 2002

### INTRODUCTION

August is upon us again and as our thoughts turn to sheep, caribou, moose and other critters fit for table fare we are reminded that it is time to get the newsletter out. All of us here at the Fairbanks FSDO hope your summer is going well and that you have had, or will have, the chance to get out and enjoy this great and beautiful place we live and work in.

Remember that this publication is for you, the maintenance professional, and your compliments, criticisms, and ideas are important in keeping this publication informative, interesting, and helpful as you go about your vital tasks. We know there are some real experts out there and we would really appreciate an article on your area of interest. To those who have already contributed we appreciate your efforts and look forward to hearing from you again soon.

A big thank you to all who participated in our IA Renewal Seminar in March with special thanks to Steve Conatser of Airframe Alterations and Scott Reymiller of Aircraft Welding Works, two of our local experts, for their excellent presentations. Special kudos, as well, to the University of Alaska and the many local and national sponsors who provided lunch, snacks, door prizes, and facilities. We hope you all enjoyed the seminar as much as we enjoyed putting it on.

#### **INSPECTORS**

The changes continue in the ranks of the airworthiness inspectors. Caleb Glick abandoned us to go to the Louisville FSDO and George Earp moved out of the Safety Program to be a full time avionics inspector. John Sims moved over to help George chase sparks and Jay Kitchens is now the full time Airworthiness Safety Program Manager (A/W SPM). Just this month Rod Beaman joined us from Aircom Avionics as did Rick Hrubes from Warbelow's Air Ventures. Welcome aboard guys!

Here is the latest lineup:

#### **Fairbanks Airworthiness Inspectors:**

James H. Tupper–Supervisor Roderick L. "Rod" Beaman - Avionics Blayne C. Camp George W. Earp - Avionics John Q. Gamble Harley A. Holt Patrick E. "Rick" Hrubes Eric L. Jones David Karalunas Hugh A. Keith Steve Ketzer, Jr. Robert "Jay" Kitchens - A/W SPM Cary J. Meier Kenneth C. Thomas John S. Sims - Avionics Hardy "Mark" Smith Joseph T. "JT" Walsh You may contact them by telephone at (907) 474-0276, or by email using the following format: first name.middle initial.last name@faa.gov. No spaces, no caps. If you have questions or a problem, give them a call. They are here to help you!

### SUBJECTS FOR UPCOMING A/W SAFETY MEETINGS

We are in the process of putting together our program of seminars for the coming year. Jay Kitchens, the new A/W SPM has hit the ground running and has some great ideas for programs and seminars. We will announce the time, place, and subject of each seminar well in advance, so you can plan accordingly. Be sure to check out our web page, which is another source for our schedule of events. If you would like to see a particular topic highlighted at a safety meeting, simply contact Jay Kitchens, A/W SPM, and he will do his best to make it happen. Also, if you have any questions about the Safety Program, or have a burning desire to make a presentation on a subject of interest to you, Jay will be glad to hear from you.

## **Interesting and Important Maintenance Stuff**

### Crimping

What crimping tools are in **your** toolbox? Super Champ, NAPA special, ViseGrip, or maybe a hammer and a common screwdriver? A recent memo from the FAA Continuous Airworthiness Division, AFS-300, addresses the issue of calibration of crimp tools. To cut to the chase, the memo says that crimp tools must be capable of being gauged to insure that proper crimp depths are maintained. In other words, they need to be calibrated. This can be accomplished by sending them to a certified lab, the manufacturer, or by the use of a GO/NO-GO gauge. Calibration requirements are normally established by the tool manufacturer, however, if the manufacturer does not prescribe calibration requirements, the user must develop a calibration procedure. One method is to use the tool to crimp a product (splice, terminal end, pin, etc.), measure the depth of the crimp and compare that value to data provided by the tool manufacturer. Manufacturers such as AMP, DMC etc. can provide gauges and specs to develop calibration procedures for their products. Information on crimping and crimping tools can be found in AC 43.13-1B and MIL-C-22250. The bottom line is that it might be a good time to check that toolbox and consider retirement for the "Super Champs" etc.

#### What is an ACS?

This article was provided by Marvin Nuss of the Small Airplane Directorate.

The FAA recently issued an Airworthiness Concern Sheet (ACS) regarding **TCM magnetos**. The ACS was issued because of an accident involving a Piper PA32, which experienced engine failure on takeoff. During the subsequent investigation, it was discovered that both distributor gears of the **TCM D3000** dual magnetos had failed.

What is an ACS, and how is it used? The FAA's Small Airplane Certification Directorate answered these questions for us.

About a year ago, the Small Airplane Directorate implemented the **Airworthiness Concerns Process.** The ACS is part of this standardized and structured process the FAA uses to gather additional information and resolve concerns regarding small airplane and small airplane product airworthiness.

The process's original concept came about because of the increasing number of "orphaned" aircraft; that is, aircraft that were built by a manufacturer that is no longer in business. The FAA recognized that since the manufacturing and engineering support for these aircraft was not available, most expertise for these aircraft now resides with Associations, Type Clubs, owners, operators, and mechanics. Thus, the Directorate developed a process to gather available

information on a potential safety problem and evaluate possible corrective actions in a timely manner. They then recognized that this process would be valuable in dealing with safety related situations in the rest of the general aviation fleet.

The Airworthiness Concern Sheet is used to obtain information from the field via Aircraft Associations and Aircraft Type Clubs. When informed of a safety or airworthiness concern the FAA engineer will complete an ACS detailing the available information and send the ACS to the appropriate Associations and Type Clubs. These associations and type clubs then disseminate the ACS to their members, compiling feedback information and submitting this technical and economic cost impact data back to the FAA in a timely manner. The FAA engineer also develops risk assessments using readily available data and the feedback from the field. Depending on the industry feedback and the risk assessment results, an appropriate and accurate action can then be developed. These could be an Airworthiness Directive (AD), or a Special Airworthiness Information Bulletin (SAIB), a General Aviation Alert, a Manufacturer's Service Letter, or result in no action.

The ACS process is a method to solicit public input based on their experience on specific aircraft airworthiness issues. The additional information collected via the ACS process provides real-time feedback on possible safety issues. This experience along with other data sources provides the FAA with the information needed to develop the appropriate corrective action to meet the airworthiness concern. The ACS also lets the public know about issues that the FAA is actively concerned about.

For more information about the process, the Airworthiness Concerns Guide is available on the FAA's internet website. The direct link is: <a href="http://www.faa.gov/certification/aircraft/ACPGUIDE.DOC">http://www.faa.gov/certification/aircraft/ACPGUIDE.DOC</a>

Remember, the ACS is intended to supplement the SDR not replace it. Please continue to use the SDR when appropriate.

### Who's doing the job?

Your non-certificated buddy called and he just completed a maintenance action on an aircraft and wants you to sign the logbook and maybe a FAA form 337. You think you know the guy pretty well, everyone seems to think his work is pretty good and, after all, a number of people take their aircraft to him for maintenance. So, you drop by his place, take a quick look at the records and affix you name and certificate number(s) on the appropriate documents. No big deal, right?

Well, maybe. Fact is that you just accepted full responsibility for all of the work he did and all the documentation that goes along as well. Think about it. You may want to review FAR 43 and see what it says about who is authorized to perform maintenance, personnel authorized to return to service, and maintaining maintenance records.

We don't want to beat a dead horse here, but think about how hard you worked and studied to get those certificates you have in your pocket and whose certificates are on the line. 'nuff said?

#### Good stuff, Check it out!

AD's, AC's, FAR, TC Data Sheets, and more are available on the Internet at: www.airweb.faa.gov.

# In Closing

Please try to make it to the safety seminars and other programs if you can. Many times the most valuable information that comes out of a seminar or meeting is the result of the questions and answers and the interchange of ideas and information between those in attendance rather than the formal presentation. Come on out and share. You just might have what someone else needs to know!

Since it is impossible for us to mail to all of the A&Ps in our district, when you have finished reading this Newsletter, please pass it on to one of your A&P buddies.

'Till Next Time... Keep 'em Flying!

